

Title (en)

A bonded wafer and a method of manufacturing it

Title (de)

Verbundenes Plättchen und dessen Herstellungsverfahren

Title (fr)

Substrat lié et méthode de fabrication

Publication

EP 0444942 B1 19971008 (EN)

Application

EP 91301679 A 19910228

Priority

JP 4577790 A 19900228

Abstract (en)

[origin: EP0444942A1] A bonded wafer comprising a filmy bond wafer (1), a base wafer (2), and an intermediate silicon dioxide layer (3), wherein the periphery of the bond wafer (1) is etched; this bonded wafer is made by subjecting the bond wafer to an oxidation treatment to form an oxide film over it; joining the two wafers in a manner such that the oxide film-covered face of the bond wafer is put on the base wafer to thereby sandwich the oxide film between the wafers; heating the combined wafers to thereby create a bonding strength between the two wafers; grinding the exposed face of the bond; etching the periphery of the bond wafer to remove the portion which is not in contact with the base wafer; and polishing the exposed face of the bond wafer until it becomes a thin film. <IMAGE>

IPC 1-7

H01L 21/18; **H01L 21/306**

IPC 8 full level

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CPC (source: EP US)

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Citation (examination)

EP 0413547 A2 19910220 - SHINETSU HANDOTAI KK [JP]

Cited by

EP0935280A1; EP0856876A3; EP1845557A3; EP0628995A1; EP0860862A3; EP1170801A4; US8298916B2; US7718507B2; US8429960B2; US6417108B1; US7245002B2; US8679944B2; US9138980B2; US8338266B2; US8871611B2

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